IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Sapna George et al.

Application No. : 09/486,582 Filed : July 10, 2000

For : FAST SYNTHESIS SUB-BAND FILTERING METHOD FOR

DIGITAL SIGNAL DECODING

Examiner : Andrew C. Flanders

Art Unit : 2615

Docket No. : 851663.407

Date: February 6, 2008

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF

Commissioner for Patents:

This brief is in furtherance of the Notice of Appeal, filed in this case on July 6, 2007, and is in response to the Examiner's Answer mailed December 6, 2007. Appellants hereby request any fees necessary for acceptance of this Reply Brief be charged to Deposit Account No. 19-1090.

I. <u>ARGUMENT IN REPLY</u>

Although the Examiner has rejected each of claims 1-20 under 35 U.S.C. §§ 101 and 103, <u>Final Office Action</u>, the Examiner has not made out a *prima facie* case on any of the grounds for rejection. Each ground of rejection will be addressed in turn.

A. The Claims Are Directed to Statutory Subject Matter.

The Examiner argues that claims 1 and 8 are method claims falling into the statutory process category. The Examiner then contends that the claims fall into the judicial exception of a mathematical algorithm and that no transformation or practical application that

produces a tangible, physical result is involved because "[d]igital audio data is not physical, rather a form of energy representing data. Manipulating this energy does not involve a physical transformation." See Final Office Action at 2. In the Answer, the Examiner merely summarizes his prior argument and does not address the argument or case law cited in Appellants' Brief. As noted in Applicants' opening brief, the Examiner's position has been flatly rejected by the Federal Circuit. See, e.g., Arrhythmia Research Technology v. Corazonix Corp., 958 F.2d 1053, 1059 (Fed. Cir. 1992) ("The view that there is 'nothing necessarily physical about "signals" is incorrect"). Thus, for example, the recited steps of claim 1 of "producing a first sequence of output values," "producing a second sequence of output values," and "forming decoded audio signals from the first and second sequences of output values" are steps that cause a physical transformation. This view is consistent with more recent Federal Circuit case law, which distinguished claims directed to a process of generating a signal, to a device configured to generate a signal, and to a storage medium for storing the signal (all of which were allowed by the Board) from claims directed to the signal itself (the later of which were not allowed by the Board). See In re Nuijten, 500 F.3d 1346, 1351, 1353-57 (Fed. Cir. 2007). Here, independent claims 1 and 8 (from which claims 2-7, 9, 10, 19 and 20 depend), are not product-by-process claims directed to a signal. They are instead directed, respectively, to methods of decoding digital audio data and of decoding digital audio samples.

The Examiner further contends that "forming decoded audio signals from two sequences of values ... is not a useful, tangible and concrete result, but rather the result of a process." Final Office Action at 2-3. The Examiner's reasoning is incorrect, as set forth in Appellants' opening brief. The Examiner does not address Applicants' arguments in his Answer, other than to state that the claims do not recite what is done with the decoded audio signals or the use of any type of machine. The Examiner cites no case law that a process claim directed to decoding signals or data must recite what is then done with the decoded data or that a machine is used. Thus, the Examiner has failed to establish a *prima facie* case that claims 1 and 8 are not directed to statutory subject matter. Claims 2-7, 18 and 19 depend from claim 1 and claims 9, 10 and 20 depend from claim 8. Accordingly, claims 1-10 and 18-20 are directed to

statutory subject matter.

Accordingly, claims 1-10 and 18-20 are directed to

Claims 11 and 14 are product claims in means-plus-function format. The products, respectively, are a digital sub-band filter and an MPEG decoder that produce data arrays from a sequence of input data elements. The Examiner's argument is that claims 11 and 14 would read on a general purpose computer configured to execute software instructions, which the Examiner contends is not patentable subject matter. The Federal Circuit has recently taken a contrary position. *See In re Comiskey*, 499 F.3d 1365, 1380 (Fed. Cir. 2007) (claims combining the use of machines with a mental process claim patentable subject matter; remanding for consideration of obviousness). Here, claims 11 and 14 recite much more than merely combining the use of machines with a mental process. Claims 11 and 14 recite producing data arrays from an input sequence of data elements. Accordingly, claims 11 and 14, as well as claims 12-13 and 15-17 which depend from claims 11 and 14, are directed to statutory subject matter.

B. The Examiner Has Failed to Establish a Prima Facie Case of Obviousness

The Examiner argues that Uramoto teaches decoding of digital video data, and that it would have been obvious to apply the teachings of Uramoto to digital audio data. This argument assumes that Uramoto teaches, suggests or motivates each of the recited elements for the decoding of digital video data. This assumption, however, is incorrect, as set forth in Appellants' Brief. In essence, the steps of Uramoto are performed in a different order for a different purpose. The Examiner's argument appears to be that the hardware of Uramoto could be rearranged and Uramoto reconfigured so that the steps could be performed in the recited order for the recited purpose. This is not the same thing as rendering an admittedly different method of performing a different task obvious. Uramoto simply does not teach, suggest or motivate the recited methods of decoding or systems for decoding. In addition, if Uramoto were reconfigured as suggested by the Examiner, it would not function as intended. The Examiner thus has failed to establish a *prima facie* case of obviousness.

II. <u>CONCLUSION</u>

For at least the reasons set forth in Appellants' opening brief and those set forth above, the Examiner has failed to meet his burden of establishing a *prima facie* case for rejecting

the claims. Accordingly, Applicants respectfully submit that all of the pending claims are allowable and request that the Examiner's rejections thereof be reversed.

Respectfully submitted,
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